

Arizona State Science Standards (Grades 4-8 and High School)
satisfied by the Desert Tortoise Tracking Program.

Grade 6
Strand 1

Concept 1: Observations, Questions, and Hypotheses

Formulate predictions, questions, or hypotheses based on observations. Locate appropriate resources.

PO 2. Formulate questions based on observations that lead to the development of a hypothesis.
(See M06-S2C1-01)

PO 3. Locate research information, not limited to a single source, for use in the design of a controlled investigation.
(See W06-S3C6-01, R06-S3C1-06, and R06-S3C2-03)

Concept 2: Scientific Testing (Investigating and Modeling)

Design and conduct controlled investigations.

PO 1. *Demonstrate safe behavior and appropriate procedures (e.g., use and care of technology, materials, organisms) in all science inquiry.*

PO 2. Design an investigation to test individual variables using scientific processes.

PO 3. Conduct a controlled investigation using scientific processes.

PO 4. Perform measurements using appropriate scientific tools (e.g., balances, microscopes, probes, micrometers).
(See M06-S4C4-02)

PO 5. Keep a record of observations, notes, sketches, questions, and ideas using tools such as written and/or computer logs.
(See W06-S3C2-01 and W06-S3C3-01)

Concept 3: Analysis and Conclusions

Analyze and interpret data to explain correlations and results; formulate new questions.

PO 1. Analyze data obtained in a scientific investigation to identify trends.
(See M06-S2C1-03)

PO 3. Evaluate the observations and data reported by others.

PO 4. Interpret simple tables and graphs produced by others.

PO 5. Analyze the results from previous and/or similar investigations to verify the results of the current investigation.

PO 6. Formulate new questions based on the results of a completed investigation.

Concept 4: Communication

Communicate results of investigations.

PO 2. Display data collected from a controlled investigation.
(See M06-S2C1-02)

PO 3. Communicate the results of an investigation with appropriate use of qualitative and quantitative information.
(See W06-S3C2-01)

PO 5. Communicate the results and conclusion of the investigation.
(See W06-S3C6-02)

Strand 2

Concept 1: History of Science as a Human Endeavor

Identify individual, cultural, and technological contributions to scientific knowledge.

PO 4. Describe the use of technology in science-related careers.

Concept 2: Nature of Scientific Knowledge

Understand how science is a process for generating knowledge.

PO 1. Describe how science is an ongoing process that changes in response to new information and discoveries.

PO 2. Describe how scientific knowledge is subject to change as new information and/or technology challenges prevailing theories.

PO 3. Apply the following scientific processes to other problem solving or decision making situations:

- observing
- questioning
- communicating
- comparing
- measuring
- classifying
- predicting
- organizing data
- inferring
- generating hypotheses
- identifying variables